4 - Service Tools

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JBV-1 Docking Station and DA-2 Adapter

The JBV-1 Docking Station has been designed for calibration and software update use.

The DA-2 Docking Station Adapter makes signal connections to the phone. JBV-1 and DA-2 are used as one unit.

JBV-1 main electric functions are:

- adjustable VBATT calibration voltage, current measurement limit voltage”VCHAR”, current measurement calibration current”ICHAR”
- adjustable ADC calibration voltage via BTEMP and BSI signal
- BTEMP and BSI calibration resistor
- signals from FBUS to the phone via parallel jig
- control via FBUS or USB
- Flash OK/FAIL indication

In calibration mode JBV-1 is powered by external power supply 11-16V DC. In flashing power for the phone can be taken from FPS-8 or external power supply 11-16V DC.

Product Code

JBV-1 Docking Station: 0770298

DA-2 Docking Station Adapter: 0770500

View of DA-2

Figure 1: DA-2

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MJ-2 Module Jig

The MJ-2 Module Jig is used for testing the following modules:

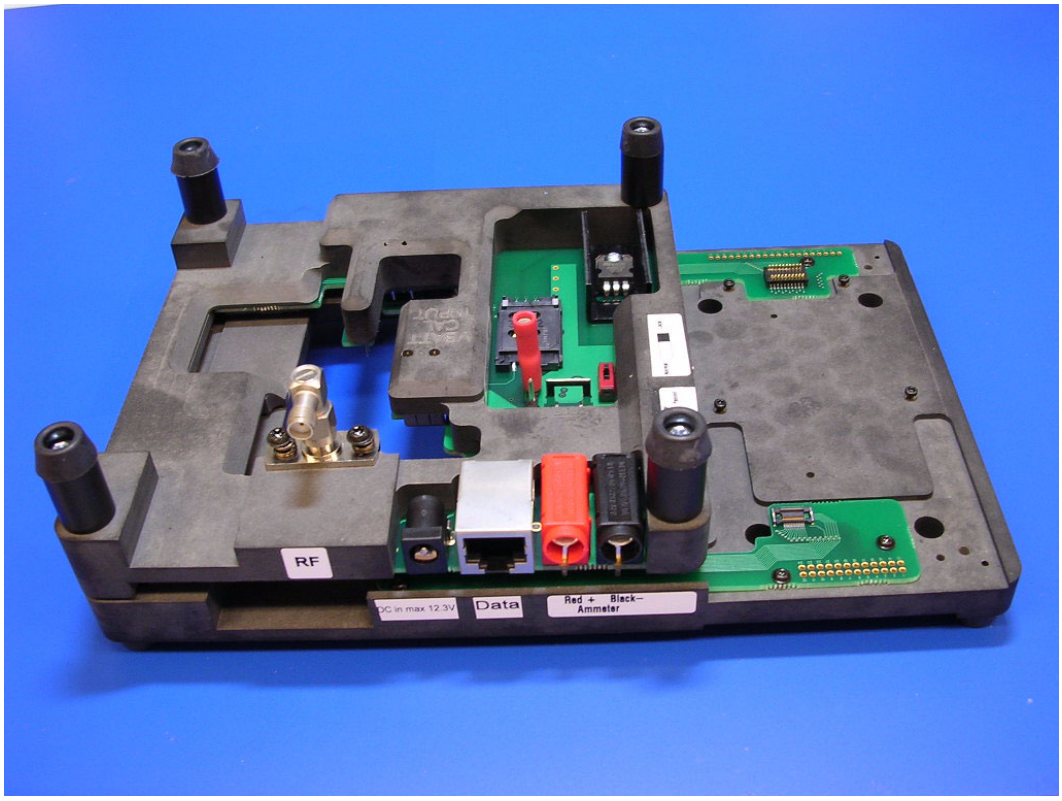
- User interface
- Baseband and RF on system module

Product Code

MJ-2 Module Jig: 0770501

View of MJ-2

Figure 2: MJ-2



Note:

The nominal supply voltage for MJ-2 is +6.0 V.

The supply voltage must not exceed +12.0 V (min. 5.0 V).

Supply jig only when J1=regulated position.

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Table 1: LCD Test Pin List

Pin	Signal Name
1	GND
2	!WR
3	GND
4	D0
5	D1
6	D2
7	D3
8	GND
9	Vddi
10	Vdd
11	LEDGND
12	LEDin
13	LEDout
14	LEDGND
15	!CS
16	D/!C
17	GND
18	D7
19	D6
20	D5
21	D4
22	TE
23	!RD
24	!RES

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Table 2: KEYPAD Test Pin List

Pin	Signal Name
1	ROCKER4
2	ROCKER2
3	ROW0
4	ROW1
5	VKEYB
6	ROW2
7	ROW4
8	COL2
9	COL4
10	GND
11	ROCKER5
12	ROCKER3
13	ROCKER1
14	COL0
15	GND
16	ROW3
17	ROW5
18	COL1
19	COL3
20	COL5

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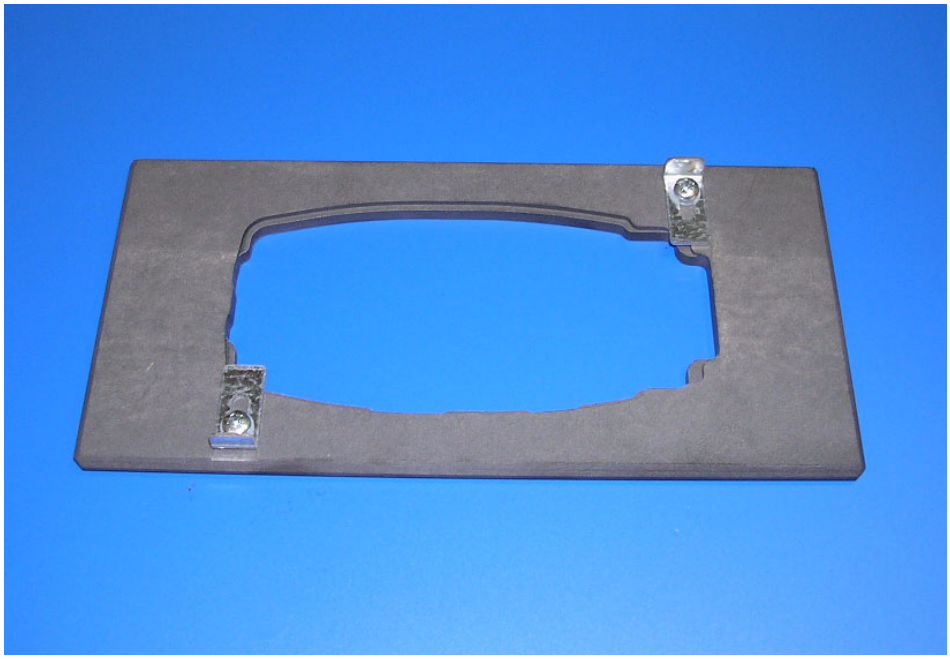
RJ-2 Soldering Jig

The Soldering Jig RJ-2 is used for soldering and as a rework jig for system module.

Product Code

RJ-2 Soldering Jig: 0770502

View of RJ-2



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SF-2 POS (Point of Sales) Flash Adapter

The POS Flash Adapter SF-2 is used in the place of phone's normal battery during service to supply a controlled operating voltage and to connect to pads which are under the SIM card.

Product Code

SF-2 POS Flash Adapter: 0770506

View of SF-2

Figure 3: SF-2

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SW Security Device PKD-1

SW security device is a piece of hardware enabling the use of the service software when connected to the parallel (LPT) port of the PC. Without the dongle present it is not possible to use the service software. Printer or any such device can be connected to the PC through the dongle if needed.

Caution: Make sure that you have switched off the PC and the printer before making connections!

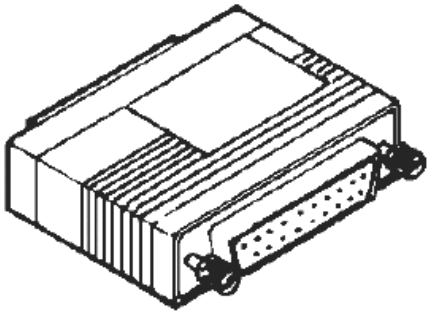
Caution: Do not connect the PKD-1 to the serial port.

Product Code

SW Security Device PKD-1: 0750018

View of PKD-1

Figure 4: PKD-1



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FLS-4S POS (Point of Sale) Flash Device (Sales Pack)

FLS-4S is a dongle and flash device incorporated into one package, developed specifically for POS use.

Product Code

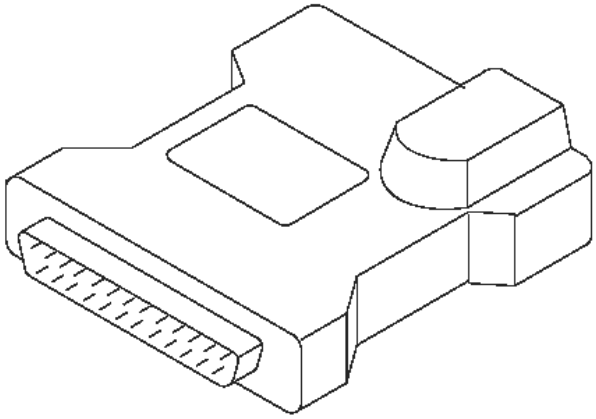
FLS-4S Sales Pack – Europe/Africa: 0080541

FLS-4S Sales Pack – APAC: 0080542

FLS-4S Sales Pack – Americas: 0080543

View of FLS-4S

Figure 5: FLS-4S



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FPS-8 FLASH Prommer (Sales Pack)

The FLASH Prommer FPS-8 is used for example with SF-2, DA-2 and JBV-1. Power is supplied to FPS-8 from the Universal Power Supply.

The sales pack includes:

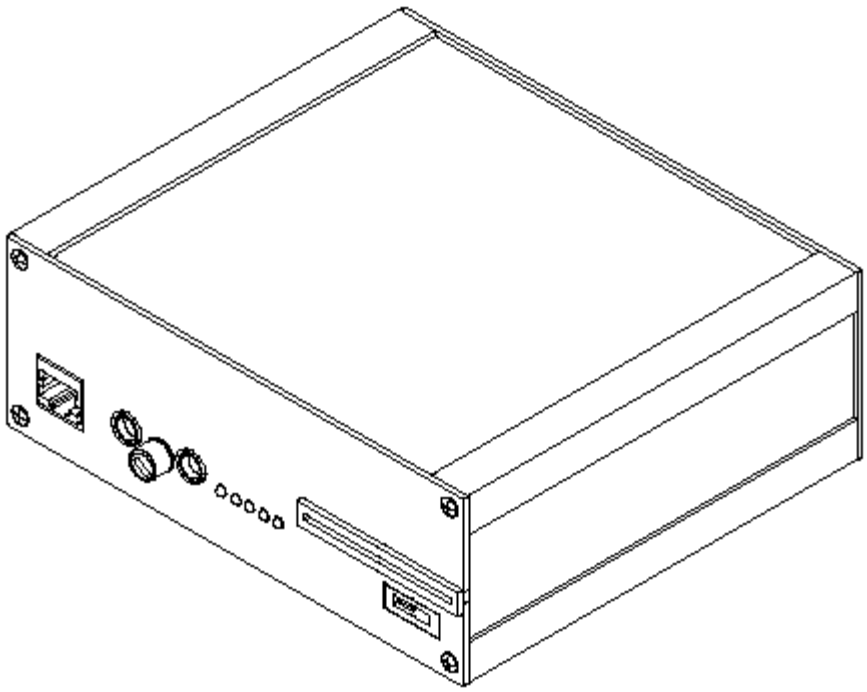
- FPS-8 Flash Prommer (0750123)
- FPS-8 Activation Sheet (9359289)
- ACF-8 Universal Power Supply (0680032)
- AXS-4 Service Cable (D9-D9) (0730090)
- Printer Cable (0730029)

Sales package code

FPS-8 Flash Prommer: 0080321

View of FPS-8

Figure 6: FPS-8



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ACF-8 Universal Power Supply

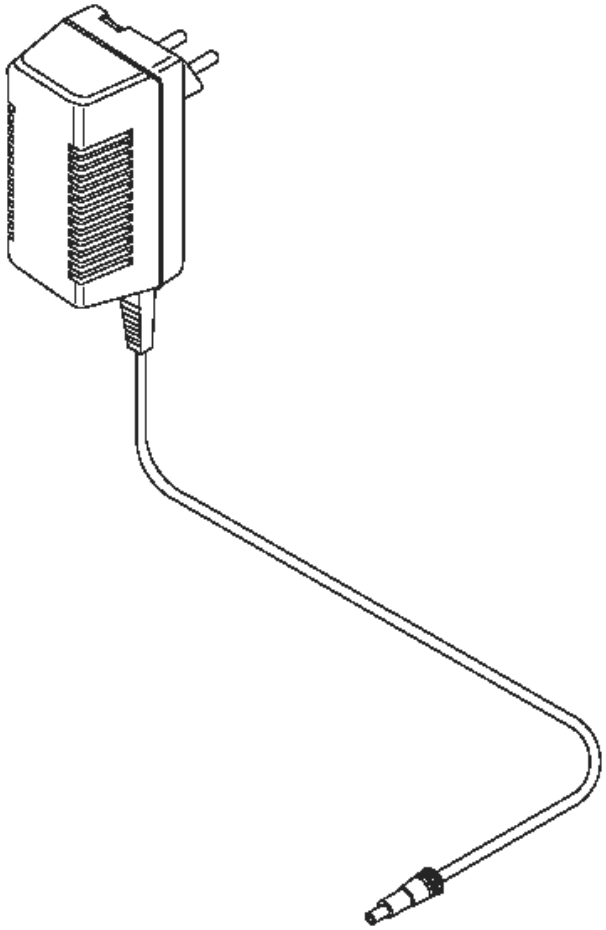
ACF-8 Universal Power Supply is used to power FPS-8. ACF-8 has 6V DC and 2.1A output.

Product Code

ACF-8 Universal Power Supply: 0680032

View of ACF-8

Figure 7: ACF-8



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FPS-8C Parallel FLASH Prommer (Sales Pack)

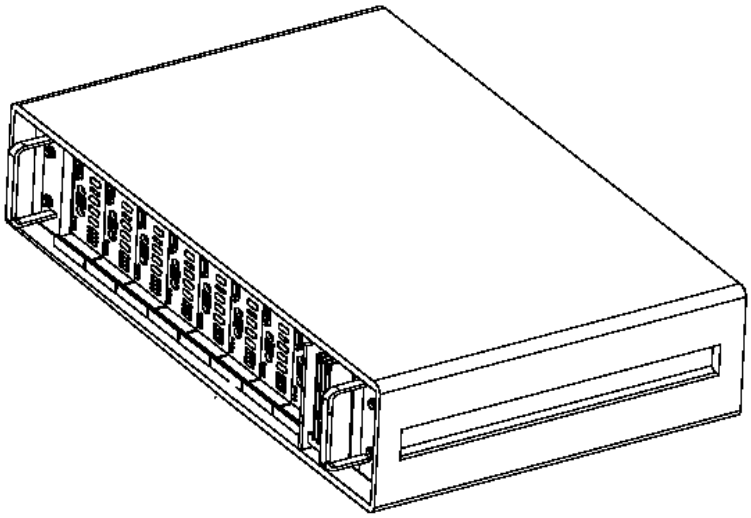
The Parallel FLASH Prommer FPS-8C is used for example with SF-2, DA-2 and JBV-1. Flash programming can be done to maximum of 8 phones parallel. FPS-8C consists of eight SF11C programming cards. SF11C card is functionally identical to FPS-8.

Sales package code

FPS-8C Parallel Flash Prommer: 0080396

View of FPS-8C

Figure 8: FPS-8C



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FLC-2 DC Cable

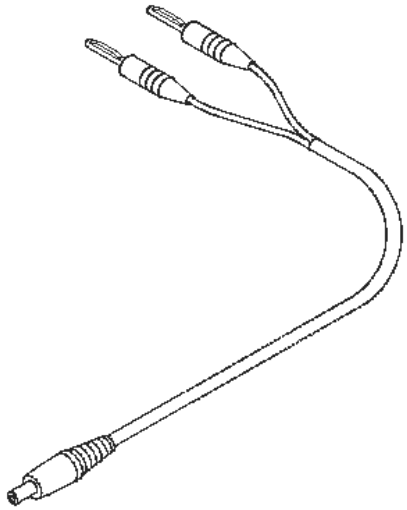
FLC-2 is used to supply a controlled operating voltage.

Product Code

FLC-2 DC Cable: 0730185

View of FLC-2

Figure 9: FLC-2



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AXS-4 Service Cable

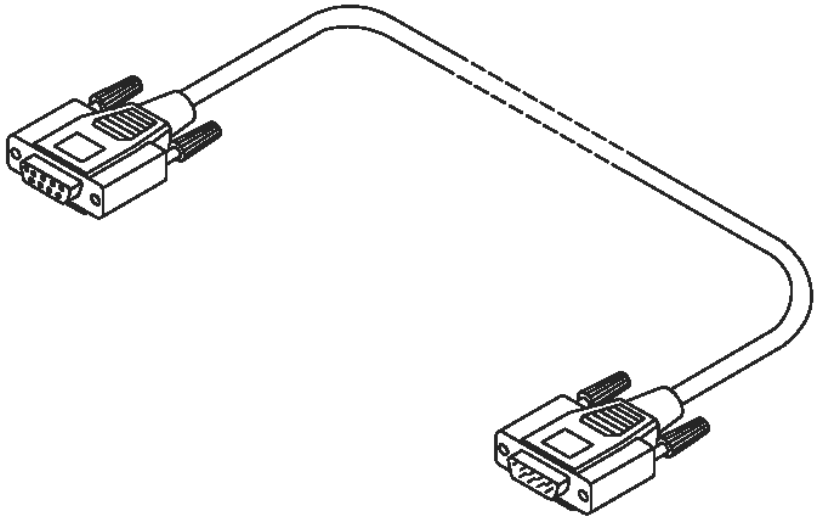
The AXS-4 D9-D9 Service Cable is used to connect two 9 pin D connectors for example between PC and FPS-8. Cable length is 2 meters.

Product Code

AXS-4 D9-D9 Service Cable: 0730090

View of AXS-4

Figure 10: AXS-4



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DAU-9S MBUS Cable

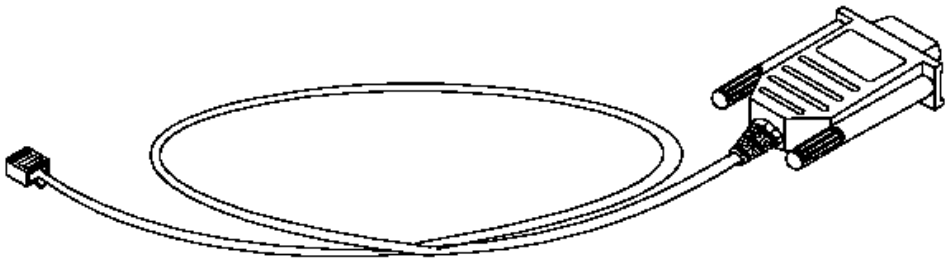
The MBUS Cable DAU-9S has a modular connector and is used for example between the PC`s serial port and Module jig MJ-2, SF-2 or JBV-1.

Product Code

DAU-9S MBUS Cable: 0730108

View of DAU-9S

Figure 11: DAU-9S



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XCS-1 Service Cable

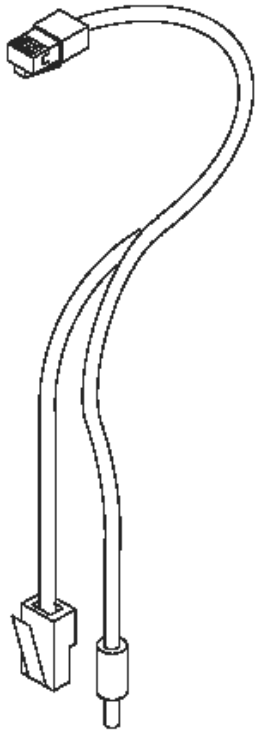
The XCS-1 Service Cable is used to connect FLS-4S to SF-2.

Product Code

XCS-1 Service Cable: 0730218

View of XCS-1

Figure 12: XCS-1



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PCS-1 Power Cable

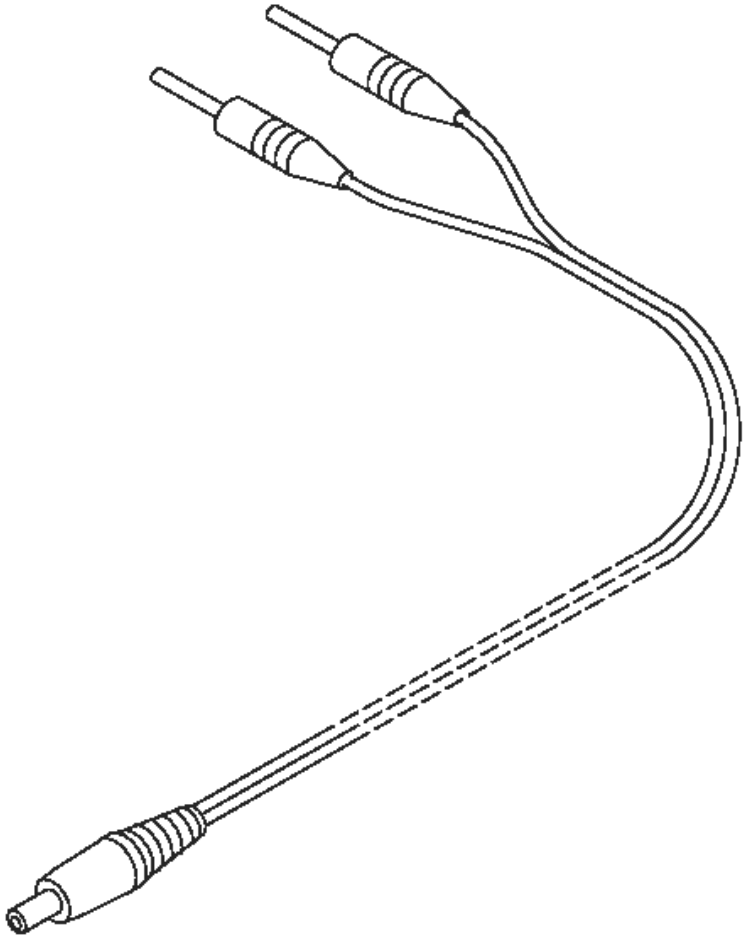
The PCS-1 Power Cable (DC) is used to connect for example JVB-1 to FPS-8.

Product Code

PCS-1 Power Cable: 0730012

View of PCS-1

Figure 13: PCS-1



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XRF-1 RF Cable

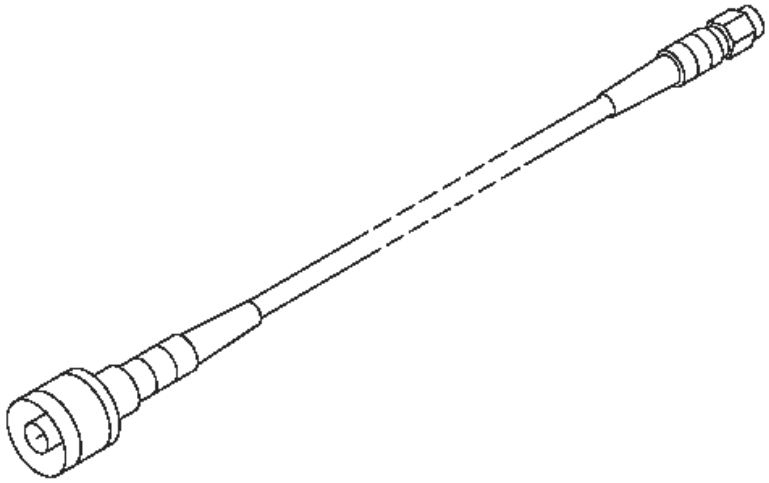
The XRF-1 RF Cable is used to connect for example Module jig MJ-2 to RF measurement equipment.

Product Code

XRF-1 RF Cable: 0730085

View of XRF-1

Figure 14: XRF-1



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XRS-11 RF Cable

The XRS-11 RF Cable is used to connect RF measurement equipment to the phone with RF connector SA-20.

Product Code

XRS-11 RF Cable: 0730265

View of XRS-11

Figure 15: XRS-11

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SCB-3 DC Cable

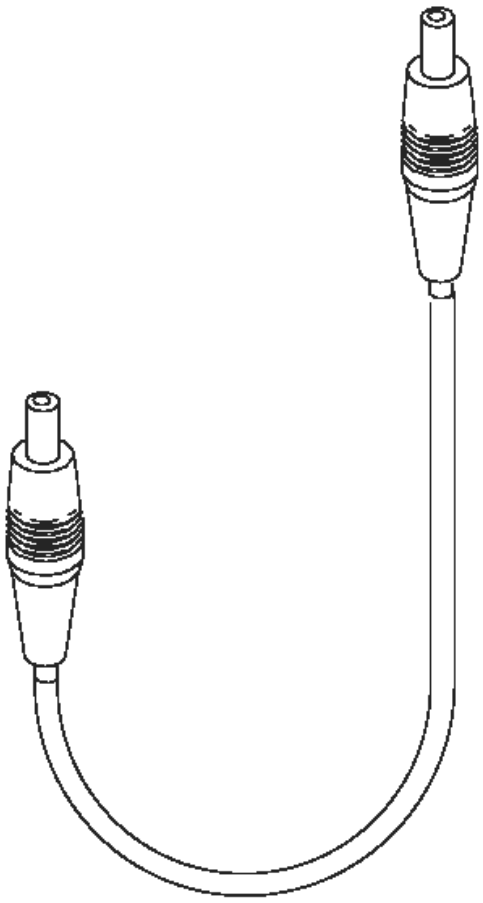
The DC Cable SCB-3 is used to connect JBV-1 to the phone, for example.

Product Code

SCB-3 DC Cable: 0730114

View of SCB-3

Figure 16: SCB-3



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XCS-4 Modular Cable

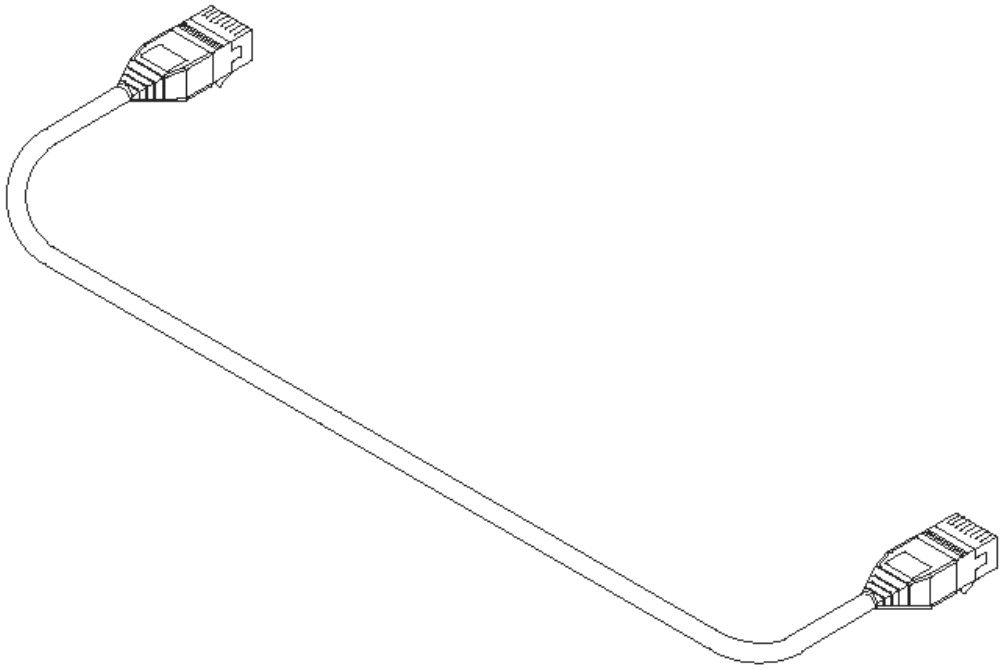
XCS-4 is a shielded (one specially shielded conductor) modular cable for flashing and service purposes.

Product Code

XCS-4 Modular Cable: 0730178

View of XCS-4

Figure 17: XCS-4



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Printer Cable

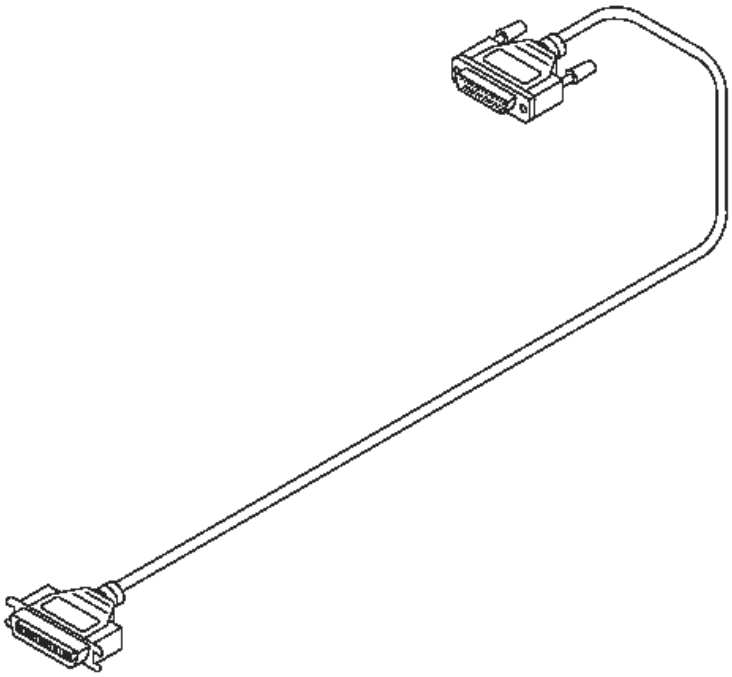
This cable is used to connect the PC to FPS-8.

Product Code

Printer Cable: 0730029

View of Printer Cable

Figure 18: Printer Cable



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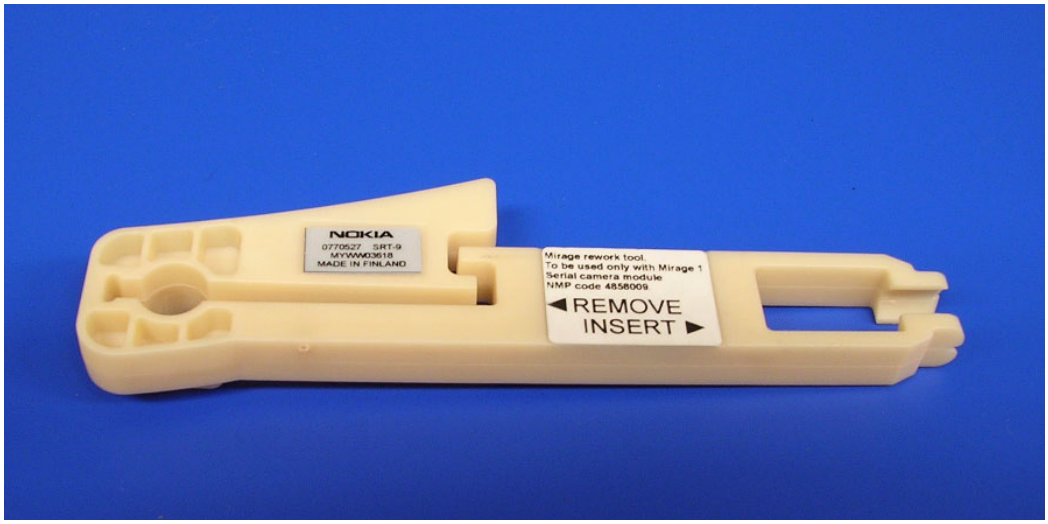
SRT-9 Camera Removal Tool

The Camera Removal Tool SRT-9 is used to remove the camera from its locking connector.

Product Code

SRT-9 Camera Removal Tool: 0770527

View of SRT-9



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SS-12 Disassembly Jig

The Disassembly Jig SS-12 is used for disassembling the phone.

Product Code

SS-12 Disassembly Jig: 0770722

View of SS-12

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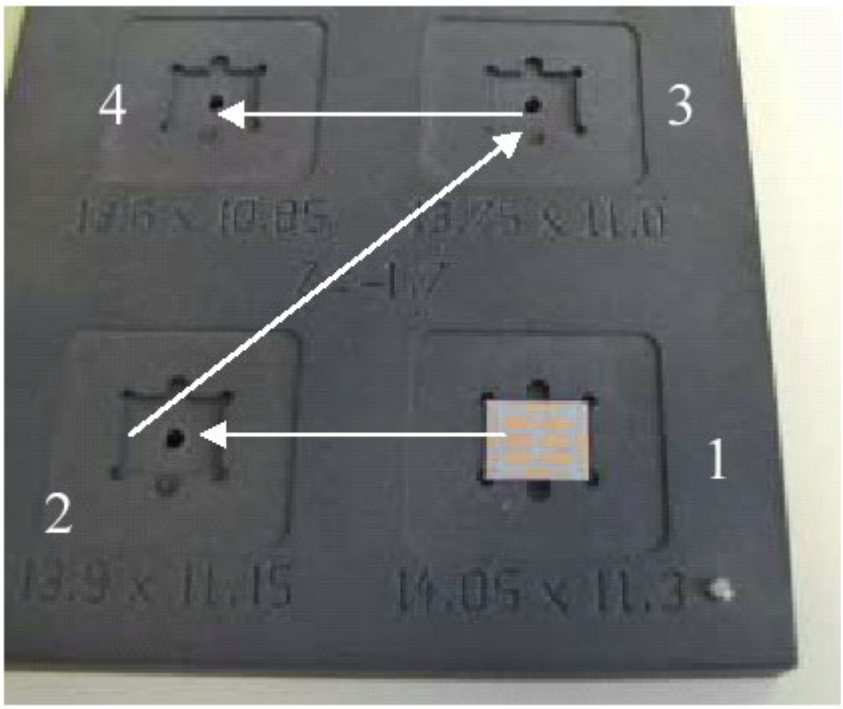
LRK-2 / 3 LGA component rework kits 1 & 2

Type designator	Description	Part code
LRK-2 (0273645) Kit 1		
MJS-76	LGA Re-work Jig	0770417
SES-2	Stencil	0770415
SPS-2	Spreader	0770471
LRK-3 (0273646) Kit 2		
SES-2	Stencil	0770415
SPS-2	Spreader	0770471

Rework procedure

Due to the large mechanical tolerance of the power amplifiers the following procedure is necessary:

1 Put the power amplifier into the MJS-76 rework jig. The PA should be placed in the best fit location which is determined by placing the PA in the largest location first, and if this is to large, re-position it to the next location. This should be carried out until the best fit location is found.



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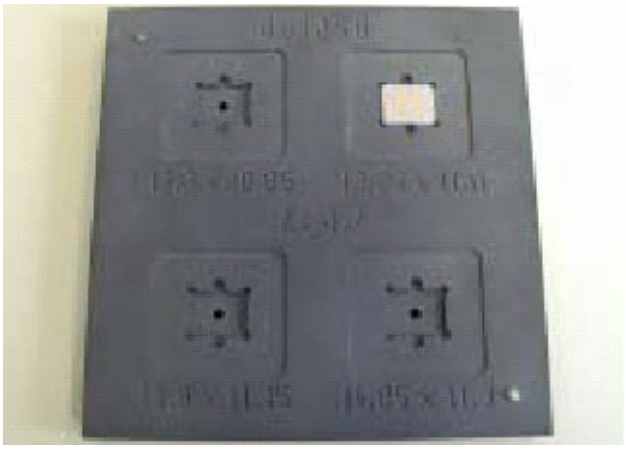
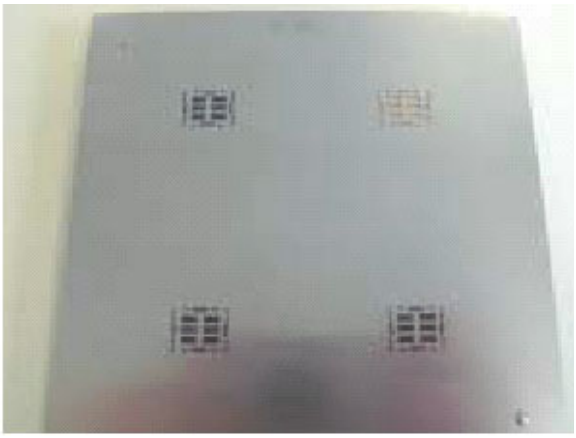
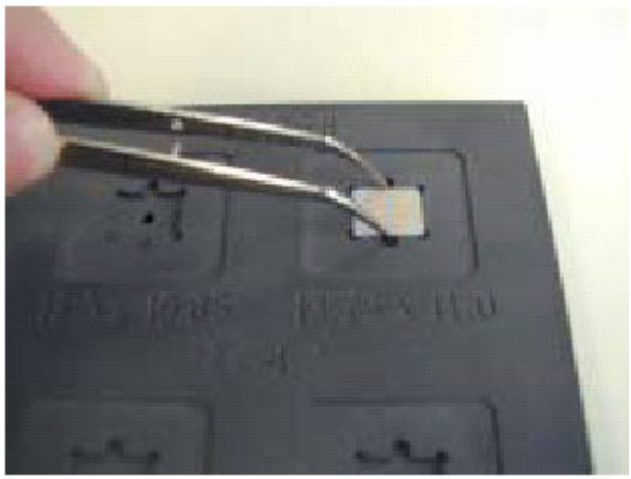
2 Once the best fit location has been found, leave the PA there and put the stencil on top of the jig and PA.





3 Put soldering paste on the PA properly.

4 Remove the stencil and the PA from the jig.



5 Start the soldering process.

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MJS-76 PA LGA re-work jig (Product code 0770417)

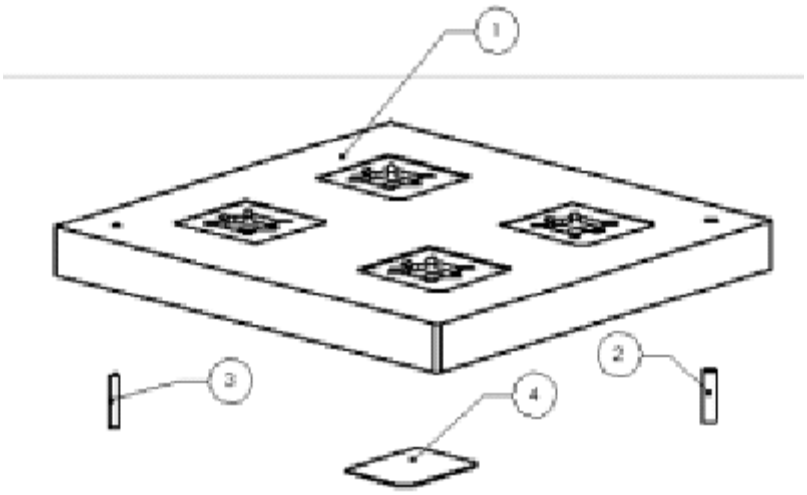
Introduction

This tool is used in LGA type component reworking purposes in central service centers.

Part list

Part number	Name of Part	Material code	Drawing number	Qty
1	Frame		SME5S910	1
2	Cylindrical pin 3x12	640b003		1
3	Cylindrical pin 3x12	640B012		1
4	Type label	9380601		1

Exploded view



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SA-20 RF Support Adapter

The SA-20 RF Support Adapter is designed for supporting the XRS-11 RF Cable when the cable is connected to the phone for RF measurement.

The RF-support tool has three snap fittings to be attached to the phone B-cover.

Product Code

SA-20 RF Support Adapter: 0770606

View of SA-20

Figure 19: SA-20

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JBT-9 Bluetooth Test & Interface box(Sales Pack)

The JBT-9 testbox is a generic device to perform Bluetooth Bit Error Rate testing and doing cordless FBUS connection via Bluetooth. An ACP-8x charger is needed for BER testing and AXS-4 cable in case of cordless testing interface usage.

Sales package includes:

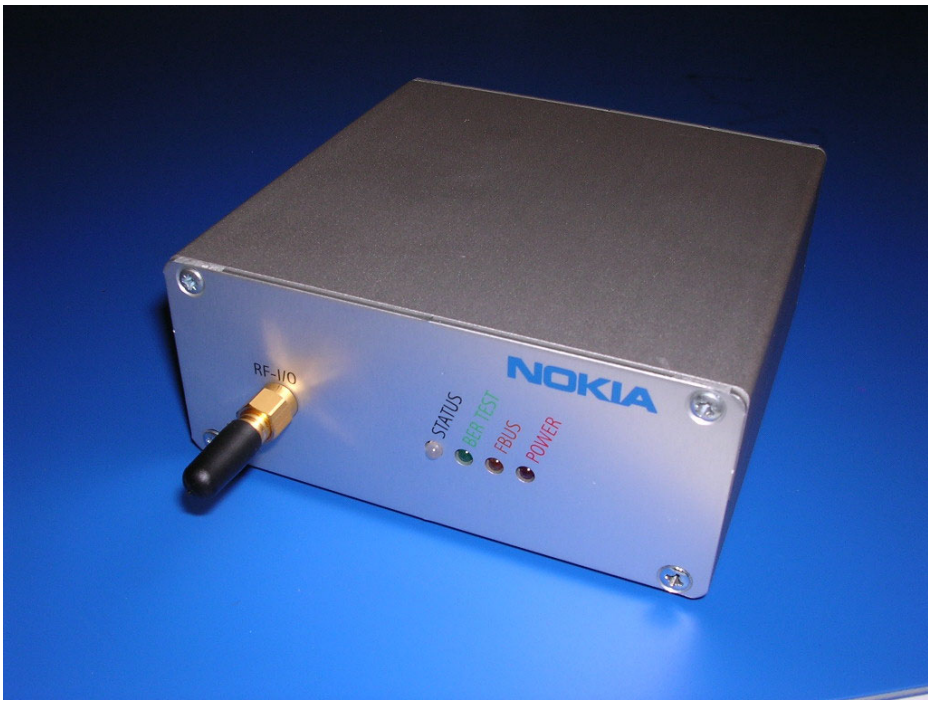
- JBT-9 testbox (0770336)
- SMA stub antenna (066P056)
- Installation and warranty information (9360613)

Product Code

JBT-9 sales kit: 0081490

View of JBT-9 with antenna

Figure 20: JBT-9



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